FIG. 12 shows a billing exception response screen display from the repair agent graphical user interface;

FIG. 13 shows a response comment screen display from the repair agent graphical user interface; and

FIG. 14 shows a summary report screen display from the repair agent graphical user interface.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the accompanying drawings, FIG. 1 shows a block diagram depicting an exemplary billing verification system 100 according to one presently preferred embodiment of the invention. In this embodiment, the billing verification system 100 preferably is controlled and operated by a customer, represented for purposes of this figure as a dotted block 102. The customer is billed for goods or services by one or more vendors 104 that interface with the system via computer workstations. The system 100 is useful for customers 102 and vendors 104 from a wide variety of industries. For example, the customer 102 may be an equipment owner whose railcars are repaired by one or more repair agents acting as vendors 104.

In the embodiment of FIG. 1, the customer 102 maintains a server 106 and a database 108. The database 108 in the present embodiment contains billing data relating to charges billed by the vendors 104 to the customer 102. The data includes billing exception records and billing exception response records, as described more fully below. The billing data is accessible by the customer 102 and, perhaps to a more limited extent, the vendors 104, via the server 106. The billing data, which is based on bills sent by the vendors 104 to the customer 102, may be loaded into the database 108 in a number of ways. For instance, a vendor 104 may provide the bill in an electronic file that is uploaded to the server 106, which loads the billing data from the electronic bill file into the database 108. Alternatively, the customer 102 may load the billing data into the billing verification system 100 from a bill received from a vendor 104. The vendor 104 may provide the bill in traditional hardcopy

format, or it may provide the bill in an electronic bill file stored on a magnetic tape or other storage media. If the bill is provided in hardcopy format, a customer operator manually enters the billing data into the database **108**. In the case of an electronic bill file, the billing data may be automatically transferred from the magnetic tape to the database **108**.

Once the billing data is loaded into the database **108**, the customer accesses the billing data via a workstation **110** that is connected to the server **106** via a distributed computer network **112**, such as an intranet, local area network, or, preferably, the Internet. Alternatively, the customer workstation **110** may be connected directly to the server **106**. Access to the server **106** preferably is controlled via an authentication and access control procedure. Through the workstation **110**, the customer is able to review the billing data and generate exceptions, as described more fully below. Preferably, the server **106** generates a customer graphical user interface in the form of custom web pages that provide access to the billing data. These web pages are viewable by the customer via a browser application resident on the customer workstation **110**. The server **106** also communicates with the customer accounts payable system **114**, preferably via the internal distributed computer network **112**.

Although only one customer workstation **110** is shown in **FIG. 1**, the system **100** may be accessible to various customer representatives via a number of different workstations **110**. For instance, if it is necessary or helpful for customer field representatives in remote locations to review the billing data, they may do so via customer workstations **110** connected to the server **106** via a distributed computer network **112**, such as the Internet. In this way, various customer employees are provided convenient and efficient access to the billing data for purposes of expedited review.

As an alternative to loading the billing data directly into the database **108**, the customer may first load the billing data into a mainframe accounting system **116**. This alternative provides a transition system for customers that have traditionally processed vendor billing data via a mainframe accounting system **116**. For instance, the customer **102** may first review the billing data

and generate exceptions on the mainframe accounting system **116**. The resulting processed data is then loaded into the database for review by the vendors **104**. After a transition period, the customer **102** may eliminate the mainframe accounting system **116** and process all billing data via the server **106** and the database **108**.

When the customer **102** generates exceptions to billing data, billing exception records are created and eventually stored in the database **108**. Once the customer **102** has generated exceptions to billing data provided by a particular vendor, the exceptions are released, or made available, to that vendor via the server **106**. The vendor then reviews the relevant billing exception records by accessing the server **106** via an external distributed computer network **118**, such as an intranet or preferably the Internet. Again, access to the server **106** preferably is controlled via an authentication and access control procedure. The server **106** provides a vendor graphical user interface, preferably in the form of custom web pages that are viewed by the vendor **104** via a browser application resident on a workstation maintained by the vendor **104**. The server **106**, restricts vendor access to only those billing exception records that relate to billing data for that particular vendor. The authentication and access control procedure ensures that one vendor is not allowed access to other vendors' billing data. After reviewing the billing exception records, the vendor may approve or disapprove the exceptions, as described more fully below.

The system depicted in **FIG. 1** preferably is controlled and operated by the single customer **102**, but provides access to multiple vendors **104**. Each vendor may have a variety of employees that require access to the billing verification system **100**. For instance, if it is necessary or helpful for vendor field representatives in remote locations to review the billing exceptions in order to confirm or deny their legitimacy, they may do so via computer workstations that connect to the server **106** via a distributed computer network **118**, such as the Internet. In this way, various vendor employees are provided convenient and efficient access to the billing data for purposes of expedited review of the billing exceptions.